221502	(Pages: 2)	Name:
		Reg.No:

FIFTH SEMESTER M.Sc. INTEGRATED GEOLOGY DEGREE EXAMINATION, NOV. 2024

(CBCSS - PG)

(Regular/Supplementary/Improvement)

CC20 GLO5 IB06 - METAMORPHIC PETROLOGY

(Geology)

(2020 Admission onwards)

Time: 2.00 Hours Maximum: 60 Marks

Credit: 3

Part A (Short answer questions)

Answer all questions. Each question carries 2 marks.

- 1. Limits of pressure during metamorphism.
- 2. Role of fluid in metamorphism.
- 3. Thermal metamorphism.
- 4. Shock metamorphism.
- 5. Xenoblastic texture.
- 6. Leocosome.
- 7. Amphibolite facies.
- 8. Abukuma facies series.
- 9. Geobarometry.
- 10. Dehydration reactions.
- 11. Decarbonation reactions.
- 12. Infiltrational metasomatism.

(Ceiling: 20 Marks)

Part B (Short essay questions - Paragraph)

Answer all questions. Each question carries 5 marks.

- 13. Describe fault zone and impact metamorphism.
- 14. Explain important non foliated metamorphic rocks.
- 15. Explain the equillibrium mineral assemblages concept in metamorphism.
- 16. Describe different grades of metamorphism.
- 17. Explain the different zones present in Barrovian sequence.

- 18. Paired metamorphic belts.
- 19. Metamorphic mineral assemblages of mafic rocks.

(Ceiling: 30 Marks)

Part C (Essay questions)

Answer any *one* question. Each question carries 10 marks.

- 20. Give an account of various metamorphic structures and its significance.
- 21. Explain the origin and petrography of foliated rocks.

 $(1 \times 10 = 10 \text{ Marks})$
